REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Initially, applicants note that in the present application two Office Actions were issued on May 12, 2006, that contained different rejections. Apparently those Office Actions were then consolidated into a new Office Action issued on June 20, 2006. The present Amendment is in reply to the Office Action of June 20, 2006.

Claims 1-3, 5-24, 26-28, 30, 31, 34, and 41-43 are pending in this application. Claims 4, 25, 29, 32-33, and 35-40 are canceled by the present response without prejudice. Claims 1-43 were rejected under 35 U.S.C. § 102(e) as anticipated by U.S. patent 6,308,205 to Carcerano et al. (herein "Carcerano"). Claims 1, 21, and 43 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. patent 6,930,785 to Weyand et al. (herein "Weyand") in view of U.S. patent 6,209,089 to Selitrennikoff et al. (herein "Selitrennikoff"). Claims 2-9, 11-17, 22-33, and 35-42 were rejected under 35 U.S.C. § 103(a) as unpatentable over Weyand and Selitrennikoff as applied to claims 1, 21, and 43, and further in view of U.S. patent 6,009,284 to Weinberger et al. (herein "Weinberger"). Claims 10 and 34 were rejected under 35 U.S.C. § 103(a) as unpatentable over Weyand, Selitrennikoff and Weinberger as applied to claims 9 and 33, and further in view of U.S. patent 5,552,901 to Kikuchi et al. (herein "Kikuchi"). Claims 18-20 were rejected under 35 U.S.C. § 103(a) as unpatentable over Weinberger in view of Kikuchi, Weyand, and Selitrennikoff.

Addressing first the rejection of claims 1-43 under 35 U.S.C. § 102(e) as anticipated by <u>Carcerano</u>, that rejection is traversed by the present response.

Independent claim 1 is amended by the present response to incorporate limitations from previously pending dependent claim 4 with further clarifications. More specifically, independent claim 1 now further clarifies that in the claimed invention hardware information of each of the plurality of image forming apparatuses is read in each respective image

forming apparatus, the read hardware information is then transmitted from each of the plurality of image forming apparatuses to the central supervisory apparatus, a database in the central supervisory apparatus stores the transmitted hardware information from the plurality of image forming apparatuses, and the database is updated based on the transmitted hardware information. The other independent claims are also amended by the present response to clarify similar features. The features recited in the claims are believed to clearly distinguish over the applied art to <u>Carcerano</u>.

First, applicants note fundamentally the device of <u>Carcerano</u> is not at all directed to the same type of device as claimed.

The claims are directed to a device such that a central supervisory apparatus can store information of hardware of different image forming apparatuses, and can download appropriate firmware to such image forming apparatuses. <u>Carcerano</u> is not even directed to a similar device. At cited column 4, lines 49-65, <u>Carcerano</u> discloses a server connected to different printers or printer/copiers and the use of a printer server. At column 14, lines 8-30 cited in the Office Action as corresponding to the "firm download device" <u>Carcerano</u> discloses a network management server 104 that polls discovered devices. However, that disclosure in <u>Carcerano</u> is directed to a system to discover when network devices are connected to a network. <u>Carcerano</u> appears to disclose the database 105 being able to be updated "as to what devices are *connected to network* 1".

Thus, the operation in <u>Carcerano</u> is not directed to downloading firmware from a central supervisory apparatus to image forming apparatuses connected thereto, but to merely determining which devices are connected to a network. <u>Carcerano</u> in such a way does not disclose any "firmware download device".

¹ Carcerano, column 4, lines 26-28. [Emphasis Added].

Further, in the claims as currently written the central supervisory apparatus includes a database "configured to store hardware information of the plurality of image forming apparatuses". Carcerano does not disclose or suggest such a feature. Merely storing data as to which network devices are connected to a network in Carcerano does *not* store data as to the *hardware information* of the plurality of image forming apparatuses.

With respect to the feature of such a database the outstanding Office Action cites

Carcerano at column 15, lines 22-62. However, that portion in Carcerano does not disclose a database in a central supervisory apparatus storing hardware information of image forming apparatuses connected thereto. Carcerano discloses a user can view the status or configuration of a device, but that disclosure in Carcerano does not at all indicate storing data of the hardware of the image forming apparatuses. In fact, such a disclosure directed to a configuration appears to be directed to a conventional browser input, as noted in Carcerano at column 15, lines 57-62.

In such ways, <u>Carcerano</u> does not disclose the features recited in each of the pending claims.

Addressing now the rejection of claims 1, 21, and 43 under 35 U.S.C. § 103 as unpatentable over Weyand in view of Selitrennikoff, the rejection of claims 2-9, 11-17, 22-33, and 35-42 under 35 U.S.C. § 103(a) as unpatentable over Weyand, Selitrennikoff and further in view of Weinberger, and the rejection of claims 10 and 34 under 35 U.S.C. § 103(a) as unpatentable over Weyand, Selitrennikoff and Weinberger, and further in view of Kikuchi, those rejections are traversed by the present response.

As noted above, independent claim 1 now incorporates limitations from previously pending dependent claim 4 with further clarifications, and the other independent claims are similarly amended. With respect to such features the Office Action cites <u>Weinberger</u> to

disclose a database at column 4, lines 3-9. However, applicants respectfully submit the Office Action is misconstruing the teachings in Weinberger relative to the claimed invention.

As shown for example in Figure 5 in the present specification, an image forming apparatus system of the present invention can store information of the hardware constructions of different image forming apparatuses connected thereto. The claimed invention operates in that manner such that each image forming apparatus itself reads its hardware information and transmits such read hardware information to the central supervisory apparatus. The central supervisory apparatus includes a database that stores the hardware information received from the image forming apparatuses, and which is updated appropriately.

Amended independent claim 1 is directed to a remote diagnosis system that remotely supervises each of clients via a communication line. Thus, information related to hardware of each of clients can be easily corrected by a central supervisory apparatus to supervise all the clients via the communication line.

In such an environment, when hardware is changed in the client, the central supervisory apparatus recognizes and automatically downloads a corresponding firmware to the client as a remote diagnosis service. To realize such an operation the central supervisory apparatus includes a database DB storing hardware for clients, which is updated by new hardware. Thus, a new firmware is downloaded in accordance with the updated hardware to an applicable client.

With such a structure it is enough for a client to simply report a change in hardware to a central supervisory apparatus for an automatic downloading of a new appropriate firmware.

Weyand in view of <u>Selitrennikoff</u> clearly does not disclose or suggest the claimed features, and <u>Weinberger</u> does not cure the deficiencies in Weyand and Selitrennikoff.

At noted column 4, lines 3-5, Weinberger merely states:

The current copier *status information* is stored in and transmitted by the translator 6 along a communication means,

such as line 52 to a data collection computer 16 at the central location 4 in response to a poll from the scanner/multiplexer 14 at the central location 4. At the central location 4 the data is processed and stored in a database in the data collection computer 16. (Emphasis added).

From the above passage it is clear that in <u>Weinberger</u> only *status information* of a copier can be transmitted to and then stored in a central location. However, that status information does not indicate hardware information of the apparatus.

As noted above the claimed invention receives hardware information from the image forming apparatuses so that appropriate firmware can be downloaded thereto. Weinberger would not be directed to any type of similar device. The use of a database to store status information is not directed to the claimed features of providing a database configured to store hardware information, to thereby download appropriate firmware.

If the noted teachings in <u>Weinberger</u> were in fact combined with the teachings of <u>Weyand</u> in view of <u>Selitrennikoff</u>, at most that would result in a device that can store information of a status of a copier. Such a device still would not meet the claim limitations.

Moreover, applicants note the operation in the claimed invention would actually be contrary and teach away from the system of <u>Selitrennikoff</u>. That is, one of ordinary skill in the art would not have modified <u>Selitrennikoff</u> to meet the claim limitations as <u>Selitrennikoff</u> discloses an opposite operation as claimed.

First, in contrast to the claims, in <u>Selitrennikoff</u> all of the clients necessarily retain old and new hardware information and install a program for comparing these information to determine if a new firmware is downloaded. Such an operation is disadvantageous for a client.

In contrast, and as discussed above, in the claimed invention it is enough for a client to report a change in hardware to a central supervisory apparatus for an automatic downloading of a new firmware. Selitrennikoff cannot realize such a simple operation.

Moreover, in <u>Selitrennikoff</u>, a *server* must send *to* a client computer hardware configuration information of the client computer.² Then, in <u>Selitrennikoff</u>, the client computer compares its hardware configuration with the information sent from the server. The claims have a contrary operation.

In the claims, the image forming apparatuses themselves transmit hardware information to the central supervisory apparatus. That feature is directly opposite to the operation in Selitrennikoff.

In such ways, Selitrennikoff actually teaches a contrary operation as claimed.

In view of these foregoing comments, applicants respectfully submit the claims as currently written clearly distinguish over the combination of teachings of <u>Weyand</u> in view of <u>Selitrennikoff</u> and further in view of <u>Weinberger</u>. Moreover, no teachings in <u>Kikuchi</u> are believed to cure the above-noted deficiencies of <u>Weyand</u>, <u>Selitrennikoff</u>, in view of <u>Weinberger</u>.

Addressing now the rejection of claims 18-20 under 35 U.S.C. §103(a) as unpatentable over <u>Weinberger</u> in view of <u>Kikuchi</u>, <u>Weyand</u>, and <u>Selitrennikoff</u>, that rejection is traversed by the present response.

Each of claims 18-20 is also amended by the present response to clarify features as discussed above.

The deficiencies of <u>Weinberger</u>, <u>Kikuchi</u>, <u>Weyand</u> and <u>Selitrennikoff</u> with respect to such features are discussed above, and in view of such deficiencies applicants submit claims 18-20 also distinguish over the applied art.

In view of the present response applicants respectfully submit the claims as currently written distinguish over the applied art.

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² Selitrennikoff at column 3, lines 31-33.

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As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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